



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,933	01/29/2004	Morio Ishizaki	57454-999	1862
7590	05/12/2008		EXAMINER	
MCDERMOTT, WILL & EMERY 600 13th Street, N.W. WASHINGTON, DC 20005-3096			WALKER, KEITH D	
		ART UNIT	PAPER NUMBER	
		1795		
		MAIL DATE	DELIVERY MODE	
		05/12/2008	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/765,933	<b>Applicant(s)</b> ISHIZAKI, MORIO
	<b>Examiner</b> KEITH WALKER	<b>Art Unit</b> 1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 February 2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.  
 4a) Of the above claim(s) 1 and 2 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 3-6 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/0256/06)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/26/08 has been entered.

Claims 1-6 are pending in the application and claims 1 and 2 are withdrawn.

Claims 3-6 are pending examination as discussed below.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 3 recites the limitation "the central axis" in line 12 on page 3 of claims.

There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,258,480 (Moriwaki) in view of US Patent 4,534,199 (Takaishi) as evidenced by US Patent 3,577,753 (Shah).

Moriwaki teaches a manufacturing method for a battery by preparing a material corresponding to the shape of the can and forming a cylindrical body by deforming. The sidewall thickness is subjected to press working to form a large thickness portion at the end portion and a small thickness. The press forming is done such that a distance between an outer circumferential surface of said large thickness portion and said central axis is equal to a distance between an outer circumferential surface of said small thickness portion and said central axis, and a distance between an inner circumferential surface of said large thickness portion and said central axis is smaller than a distance between an inner circumferential surface of said small thickness portion and said central axis (Abstract; Figs. 1 & 2; 6:40-65). Shah provides evidence that the drawing and ironing process involves inserting a punch into a die to form the cup as taught by Moriwaki (1:5-60).

Moriwaki is silent to displacing the outer circumferential surface of the large thickness portion by subjecting the sidewall to press working.

Takaishi teaches a method for creating stepped tubes. Specifically, Takaishi teaches taking a stepped tube and moving the thicker regions that form the steps from the outside of the tube to the inside of the tube or from the inside of the tube to the outside of the tube (Abstract, Figs. 1a & 2a; 3:20-36). This method produces stepped

tubes with high accuracy in shape and physical properties in a simplified manner (1:39-46).

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the method of making a casing taught by Moriwaki with the rib flipping method taught by Takaishi to produce a casing with a smooth outer circumference by a highly accurate shape forming means and in a simplified manner.

3. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,258,480 (Moriwaki) in view of US Publication 2002/0043089 (Reiche) as evidenced by US Patent 3,577,753 (Shah).

The teachings of Moriwaki and Shah as discussed above are incorporated herein.

Moriwaki is silent to displacing the outer circumferential surface of the large thickness portion by subjecting the sidewall to press working.

Reiche teaches a method of making a tube with different thicknesses (Abstract). The method includes forming a tube with a thicker region and a thinner region and the thicker region is on the outer diameter of the tube. Then the tube is run through the mandrel again and the thicker portion that is on the outside is pressed to the inside of the tube and thus forms a tube with a smooth outer diameter and an inner diameter having a thicker portion that points inward (Figs. 3-7; [0021-0025]). This method is

simple in nature and provides a means of creating a smooth exterior surface with thicker portions inside the pipe ([0009]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify Moriwaki's method of making a casing with the method of inverting the thicker portion of a pipe taught by Reiche, to create a smooth outside diameter ([0006]).

***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection based on the amended claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH WALKER whose telephone number is (571)272-3458. The examiner can normally be reached on Mon. - Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K. Walker

/PATRICK RYAN/  
Supervisory Patent Examiner, Art Unit 1795